ENERGY SECURITY FOR CANADA

COMPETITIVE ENERGY PRICING

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Ministry of Energy
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CONTENTS

COMPETITIVE ENERGY PRICING

1. INTRODUCTION

This paper addresses an important aspect of Canada's policy for managing its energy situation. It focuses on the pricing system that applies to crude oil and natural gas, the fuels which have the greatest bearing on the markets for consumer forms of energy. It reviews the current approach to pricing, identifies areas of concern and proposes principles and policies for ensuring the benefits which competitive pricing can provide.

2. THE IMPORTANCE OF ENERGY PRICES TO CANADA'S ECONOMY

Canada ranks very high among industrial countries in terms of the amount of energy it uses to produce goods and services. There are many reasons for this, including a relatively harsh climate, a low population density and a large base of valuable resources that require extraction and upgrading.

A major consequence of this heavy dependence on energy is that the level of energy prices — and the rate at which they change — have a significant bearing on Canada's economic well-being. For example, when world energy prices are rising, they raise the cost of producing many goods at a faster pace in Canada than in countries which are less

dependent on energy. This makes it difficult for domestic industries to compete and leads to a loss of sales and jobs.

Energy price changes are also important because they affect the general rate of inflation, interest rates, consumer spending and business investment. Over the past several years, significant changes in energy prices have altered Canada's potential for employment and economic growth.

Changes in energy prices also affect the incomes of people and companies engaged in the production of energy in Canada. The high concentration of petroleum resources in western Canada, for example, exposes this region to the consequences of energy price swings.

Canada's present pricing policies for oil and natural gas are intended to make domestic prices more sensitive to market forces. While this is an acceptable objective, it must be recognized that price volatility will likely contribute to economic instability. The impacts may average out over short-run price cycles, but they could be permanently damaging to Canada's industrial base if energy prices are on a sharply rising trend.

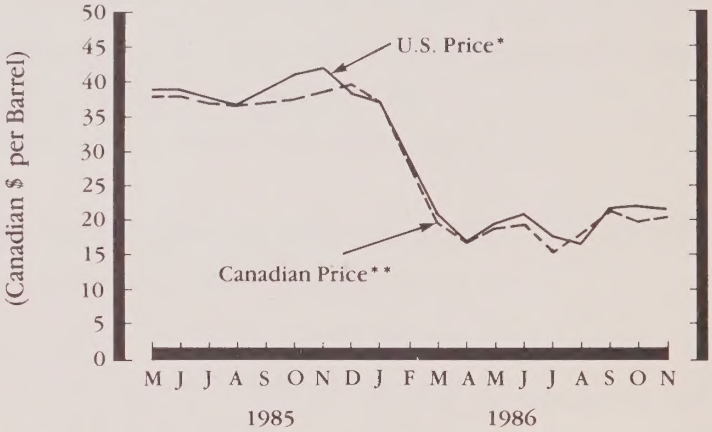
3. RECENT PRICING DEVELOPMENTS AND OUTLOOK

Crude Oil Pricing

Since the implementation of the Western Accord in June 1985, Canadian crude oil prices have reflected competitive international prices.

Oil is now purchased in Canada at prices negotiated between buyers and sellers. Refiners' posted prices are adjusted at intervals to reflect international and domestic forces of supply and demand. The result is that posted prices at Edmonton have closely followed spot crude oil prices at Chicago, with a differential of about $1 U.S. that reflects the cost of transportation.

Crude Oil Prices in Canada and the United States



* West Texas Intermediate at Chicago, Spot

**Edmonton Posted

World oil markets have become very competitive in the last year. Artificially high prices of the early 1980s were sustained only by an agreement among members of the Organization of Petroleum Exporting Countries (OPEC) to restrain production. However, a large surplus supply soon emerged as a consequence of reduced demand and increased non-OPEC production. This surplus has led to competition among OPEC and other producers and has driven prices far below 1985 levels. Since August 1986, prices have

fluctuated in the range of $14-$19 U.S. per barrel, and OPEC is currently aiming for the top of the range through renewed production restraint.

The federal and provincial governments have responded to the 1986 drop in crude oil prices by tax and royalty reductions and incentives. These measures have helped to cushion the impact of falling prices on cash flow and investment in the upstream petroleum industry, without direct intervention in pricing.

Petroleum Product Pricing

Corporate concentration in major petroleum product markets has increased and price competition has diminished.

Recent developments in petroleum product markets have raised concerns that inadequate competition may deny consumers the full benefits of lower crude oil prices.

Markets have been adjusting to a 24 per cent drop in sales since 1979. Many home heating oil dealers have left the business. Several major oil refineries and several hundred gasoline stations have been closed. This rationalization should have led to operating efficiencies and kept prices as low as possible to consumers.

Corporate concentration in petroleum product markets has increased in recent years. Acquisitions in refining and marketing have raised the national market share held by the four largest refiners and marketers from 58 to 70 per cent since 1981.

Corporate Concentration in Retail Gasoline Markets

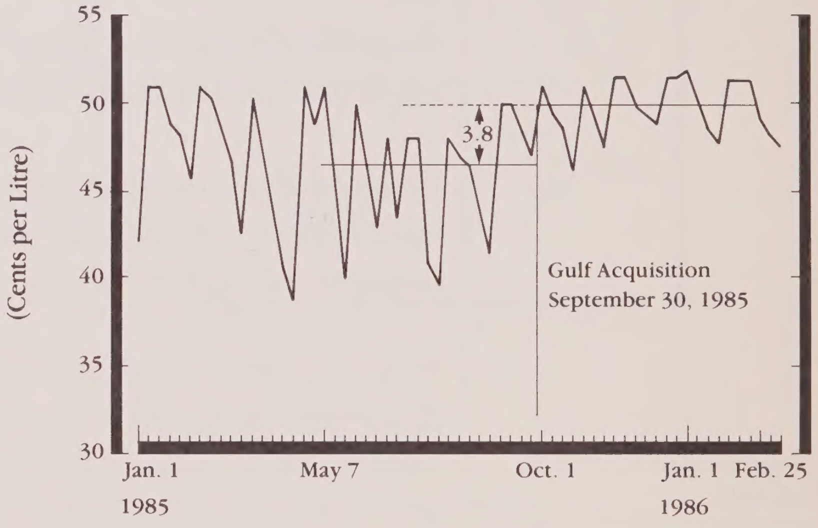
	% of Market Held by Four Largest Refiners		
Market	1981	1984*	Increase
Atlantic	73.7**	77.1	+3.4
Quebec	45.1	62.2	+17.1
Ontario	59.4	73.9	+14.5
Prairie	63.2	69.8	+6.6
Pacific	76.1	80.7	+4.6
All Canada	58.1	70.0	+11.9

*Post-acquisition of Gulf Canada downstream assets
**1980 data

Source: Restrictive Trade Practices Commission

More recently, the Petro-Canada acquisition of downstream assets west of Quebec from Gulf Canada has had the effect of lessening retail price competition. Gasoline prices in Toronto were markedly higher after the takeover, even after allowing for federal tax changes. Also, price wars decreased in intensity. Independent gasoline retailers, who typically compete with integrated majors through discount prices, now have fewer choices among suppliers.

Gasoline Pricing Cycles in Toronto



Note: The federal excise tax on gasoline increased by 2.0 cents per litre on September 1, 1985.

In a fully competitive market, consumers expect to receive the full benefits of the fall in crude oil prices. In 1986, pre-tax prices for petroleum products fell, but not as far as would have occurred with a complete pass-through of lower crude oil prices. If gasoline prices had fully reflected the drop in crude oil costs, consumers would have saved

Pass-through of Lower Oil Prices in Toronto

	Price Change[1] (cents per litre)
Crude Oil (lagged 60 days)	- 11.6
Products:	
Light fuel oil (posted price)	- 9.3
Diesel (rack contract)	- 10.3
Gasoline (retail) – leaded	- 10.1
Gasoline (retail) – unleaded	- 9.5

[1] Difference between average 1985 price (July-December) and average 1986 price (July-December), net of taxes.

about 1.8 cents a litre in Toronto; and similar amounts in several other Ontario cities. A saving of 1 cent a litre is equivalent to about $100 million in the province's annual gasoline purchases.

In most regions of Canada, competitive forces are somewhat weaker than in southern Ontario. Correspondingly, gasoline prices, net of provincial taxes, have remained significantly higher than in Ontario.

Gasoline prices in the United States are generally lower than those in Canada. Although this reflects many differences between the two countries, greater competition in many U.S. markets is a significant factor.

Canadian and U.S. Gasoline Prices

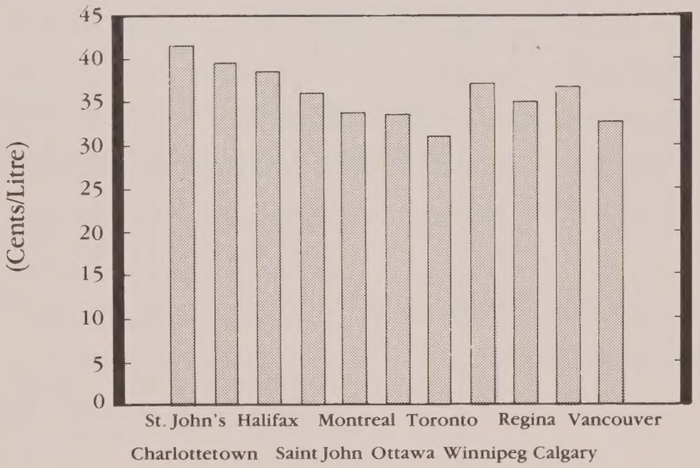
City	Pre-tax Price* (Cdn. cents/litre)
Canada:	
Montreal	27.0
Toronto	24.0
Edmonton	28.5
Vancouver	25.8
U.S.:	
Boston	22.3
Long Island	20.9
Detroit	23.0
Minneapolis	25.2
Seattle	23.4

* Average retail price of regular leaded gasoline net of taxes, April-October, 1986

Source: Statistics Canada; Energy, Mines and Resources Canada; Lundberg Letter

Canadian Gasoline Prices

Regular Leaded Gasoline Net of Provincial Taxes September 1986



Source: Statistics Canada

Natural Gas Pricing

Natural gas markets in Canada are being slowly deregulated.

The Agreement on Natural Gas Markets and Prices of October, 1985 set out to create a more flexible and market-oriented pricing regime for domestic natural gas pricing. One of the key principles was "to foster a competitive market for natural gas, consistent with the regulated character of the transmission and distribution sectors of the gas industry".

The Agreement established that, effective November 1, 1986, the prices of all natural gas in interprovincial trade would be determined by negotiation between buyers and sellers. A transition period of one year preceding that date was established, during which the necessary regulatory and legislative amendments could be made and the outstanding issues resolved.

During the past year several important steps towards achieving a more competitive market have been taken.

- Effective October 31, 1985, gas users were given the option to purchase directly from producers at freely negotiated prices and terms, subject to the availability of capacity on transmission and distribution systems.

- The National Energy Board decision on TransCanada Pipeline Availability of Services removed several obstacles to the provision of interprovincial transportation service to direct purchasers of natural gas.

- The Ontario Energy Board has approved interim transportation service for direct purchasers within the province. The Board is currently examining the provision of transportation service and other matters including the unbundling of distribution charges.

As a result of these changes, natural gas is now reaching many large industrial and commercial users at significantly lower prices. Some price reductions are the result of direct purchase arrangements. Others arise from competitive marketing programs, under which gas producers contracted to TransCanada Pipelines offer reduced prices to individual customers in order to meet the competition from direct purchase opportunities and from other energy forms.

Residential and commercial gas users in Canada are not receiving the benefits of competitive pricing.

The price reductions offered to date to the natural gas distributors in eastern Canada are much smaller than those received by large users. The main reason for this is that only large customers have had access to lower prices through direct purchases or competitive marketing programs.

If the wholesale price of gas were the same to all customers in Ontario, it would be about 30 per cent lower than with price differentiation among different classes of customer, according to the recent National Energy Board staff report, "Canadian Energy Supply and Demand, 1985 - 2005".

Canada's export policy has been relaxed, and U.S. customers have been able to buy Canadian gas at lower prices than Canadian customers.

The 1985 Agreement on Natural Gas Markets and Prices stipulated that the price of exported gas should not be less

Comparative Prices for Canadian Gas[1]

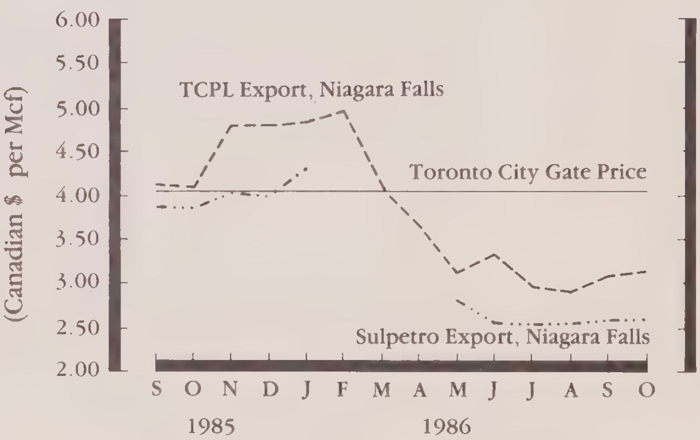
	$ per Mcf
Exports to United States[2] (through Ontario)	2.41
Sales within Alberta	1.50-2.00
Sales to central Canada	
• Direct purchases	1.50-2.00
• Competitive marketing programs	2.00-2.50
• Distributor contracts with Western Gas Marketing[3]	2.64

[1]Prices calculated at the Alberta border, late-1986.
[2]Average of licences GL-82 and GL-83, 1985-86 contract year.
[3]Base price for residential and commercial customers.

than the price charged to Canadians for similar types of service in the area or zone adjacent to the export point. This was a relaxation from the previous uniform border pricing test.

During the contract year 1985-86, large volumes of Canadian natural gas were exported to U.S. customers at prices below the regulated price to Canadian customers. As an example, prices under two licences for exports through Niagara Falls averaged respectively 68 cents and 19 cents per Mcf less than the regulated price at the Toronto City Gate of $4.06 per Mcf.

Domestic and Export Prices for Natural Gas



Source: National Energy Board

The gas price-competitiveness position of Canadian industries has worsened with respect to their United States counterparts. Competitive forces have pushed down natural gas prices further in the United States than in Canada.

A survey of neighbouring markets illustrates this situation. The average price paid by industrial users in

the survey declined much further in the U.S. than in Ontario ($1.54/Mcf in U.S. states bordering Ontario and $0.54/Mcf in Ontario) between October 1985 and July 1986.
Prices paid by U.S. ammonia producers are 13 per cent lower on average than those paid by Ontario producers. An ammonia producer in Ohio pays 22 per cent less for gas than does a major competitor in southwestern Ontario.

Price Outlook

Volatility is likely to be a key feature of the world oil market. This would be reflected in Canada as a result of deregulation.

Currently, oil producers worldwide have the capacity to produce some 10 million barrels per day more than consumers require. Until most of this surplus is worked off, world oil prices are unlikely to rise and stay beyond the level of $25 U.S. (in 1986 dollars). Prices in the next five years or so could be in the $15-25 U.S. range if OPEC succeeds in re-imposing effective production restraint. If production is not restrained and a price war breaks out, prices could fall to the $10 level or even lower for short periods.

In the longer run, crude oil prices could rise to the $20-30 U.S. range (in 1986 dollars) sometime in the 1990s, when a balance between world production capacity and demand might be attained. Prices above the $30 level are likely to be unsustainable, but price excursions to this high level could occur in unusual circumstances.

Given the surplus supply of natural gas in western Canada, domestic prices could remain soft in the near term, but they may be pushed up in the 1990s when the United States market is expected to tighten.

In the short run, the outlook is for continued weakness in natural gas prices. Driven by the need for competitive prices in end-user markets, prices received by gas producers are unlikely to reach the levels of the early 1980s.

However, two factors could complicate the natural gas pricing outlook in the 1990s: the United States market, and the price of crude oil. In the U.S., gas reserves are small in relation to annual requirements, and prices could rise if and when the so-called "gas bubble" diminishes. This will tend to push up Canadian prices. There could be stresses on the Canadian gas market if large demands were placed by U.S. buyers.

The price of crude oil will influence — but not control — the price of natural gas, through competition between heavy fuel oil and gas in industrial and utility markets. If crude oil prices rise, natural gas prices will likely rise as well, but not necessarily in a lock-step manner.

4. POLICIES FOR CANADIAN ENERGY PRICING

The primary objective of energy pricing policy should be to remove barriers to competitive markets and to ensure that Canadians derive the benefits of investment in their energy supplies.

Ontario believes that the following principles and policies would help in the achievement of this objective.

(1) Flexibility in response to world price changes:

Ontario supports the principle of flexibility and consultation put forward in the Western Accord, namely that:

> "In the event of international oil market disturbances that result in sharp changes to crude oil prices, with potentially negative impacts on Canada, the Government of Canada, following consultations with provincial governments, will take appropriate measures to protect Canadian interests."

World oil prices can change dramatically in ways that are not related to the costs of production or the most efficient utilization of the resource. In a totally deregulated market Canadian oil prices could thus be subject to excessive fluctuation, both upward and downward. The consequences for the Canadian economy could be severe.

In a price war, crude oil prices could fall too low to support current production, let alone new production, with adverse consequences for Canada's producing regions. In a tight supply situation, prices could rise so far as to impose severe hardship on consumers across the country.

While energy prices in Canada should generally relate to world market competitive forces, unique Canadian circumstances could require consideration of price incentives to develop long run sources of supply, just as in the past they required lower than world prices, on a temporary basis, to ease the impact on consumers and promote Canada's competitiveness.

(2) Consumers' Support for Securing Supplies

Consumers will be reluctant to shoulder the high costs of new supplies if they do not receive the appropriate benefits when prices are falling.

Canadians recognize that there is a strategic value in maintaining a domestic oil production capability for meeting their needs. If they are to be called upon to support the development of costly new supplies of crude oil, they should share in future economic rents. In effect, the pricing of such supplies should contain a reasonable return to consumers for the risks associated with their share of the investment.

(3) Greater competition in petroleum product markets

The prices of petroleum products should reflect competitive market forces.

Market concentration and reduced price competition deny consumers the benefits of low oil prices.

Through vigilant application of competition policy, the federal government should ensure that domination of the refining and marketing of oil by large companies does not give rise to abuse of market power. Increased concentration of ownership in petroleum product markets should be avoided, and new players should be encouraged to enter these markets. A healthy sector of independent retailers is required, with access to supply from domestic refiners on equitable terms. Also, restrictions on the import of petroleum products into Canada should be avoided, in order to promote competitive markets in Canada.

(4) Removal of barriers to competitive natural gas pricing

Many changes are still required to ensure that natural gas prices are non-discriminatory and respond to market forces.

Barriers that permit undue price discrimination between different classes of customers must be removed. In particular, wholesale prices of gas destined for industrial markets, feedstock markets and residential and commercial markets should not be differentiated.

Supply contracts entered into by natural gas distributors in a regulated price environment must be satisfactorily renegotiated. Conditions that prevent distributors from purchasing gas directly, including removal permit conditions, must be lifted.

There must be full separation of the transportation and marketing functions of TransCanada PipeLines and its subsidiary Western Gas Marketing. Transmission tolls should not reflect any costs incurred in purchasing and marketing arrangements.

Transportation and distribution tolls should be lower. Producers and governments should not bear the entire burden of adjustment to market forces.

(5) Fair pricing in natural gas markets

Canadian consumers must see fairness in the process and in the results of competitive pricing.

The Government of Canada must take action to correct the situation where export natural gas prices are lower than domestic prices in the area adjacent to the export point.

An effective system of monitoring and publicizing current prices of natural gas exported from Canada must be instituted. These prices must be promptly and publicly reported.

In the absence of timely disclosure of export prices, domestic natural gas buyers should have the right of first refusal for export volumes of natural gas. Exercise of this right of first refusal implies renegotiation of existing contracts.

Domestic natural gas prices should not necessarily match rising U.S. prices regardless of how far they go. A good part of the Canadian gas supply system was developed with public capital and Canadians should benefit from this investment.

(6) Natural gas pricing as a means of enhancing energy security

Canada's energy security could be weakened by too great a dependence on imports of crude oil supplies. The Government of Canada should ensure that the domestic price of natural gas provides sufficient incentive for off-oil substitution to contribute to this energy security objective.

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